

## CLAIMS

We claim:

1. An integrated-circuit ("IC") layout comprising a first set of vias that are in shape of a non-quadrilateral polygon.
2. The IC layout of claim 1, wherein the polygon is an octagon.
3. The IC layout of claim 2, wherein the octagon has eight equal sides.
4. The IC layout of claim 2 further comprising a second set of vias that have a diamond shape.
5. The IC layout of claim 4 further comprising a third set of vias that have a rectangular shape.
6. The IC layout of claim 1, wherein the polygon is a hexagon.
7. The IC layout of claim 6, wherein the hexagon has six equal sides.
8. An integrated-circuit ("IC") layout comprising a first set of vias, wherein each via in the first set traverses at least two layers and has one contact on each of the layers, wherein at least one of the contacts is in shape of a non-quadrilateral polygon.
9. The IC layout of claim 8, wherein the polygon is an octagon.

10. The IC layout of claim 9 further comprising a second set of vias, wherein each via in the second set traverses at least two layers and has one contact on each of the layers, wherein at least one of the contacts has a diamond shape.

11. The IC layout of claim 10 further comprising a third set of vias, wherein each via in the third set traverses at least two layers and has one contact on each of the layers, wherein at least one of the contacts is in shape of a rectangle.

12. The IC layout of claim 11, wherein the length and width of the rectangle are different.

13. The IC layout of claim 11, wherein the rectangle is a square with equal length and width.

14. The IC layout of claim 8, wherein the polygon is a hexagon.

15. The IC layout of claim 8, wherein each contact of each via is in shape of a non-quadrilateral polygon.